April 19, 2006

Dwight Sanders State lands commission, 100 Howe Avenue Suite 100 South Sacramento California 95825-8202

Re: Stop Cabrillo Port LNG

Dear Mr. Sanders,

Please stop Cabrillo port LNG industrial plant from progressing any further in the permit process. California law prohibits industrial intrusion on highly scenic areas. The last remaining wild areas on the Southern California Coast will be permanently despoiled if this industrial plant is installed. In fact over 10 national parks, national recreation areas, state, city and county parks will be despoiled. This would forever impact the quality of life of the areas residents and negatively impact the millions of vistors who come to hike and enjoy the seashore. In addition, federal and state governments own studies show that this project would:

- result in both short term and long term adverse impacts to the coast and it's residents.
- Increase smog levels (tons of pollutants spewing directly upwind from our houses, beaches and hiking trails.
- contain 14 story high pollution spewing industrial towers with lines of support ships which forever will be our new horizon. This towers will be brightly lit at night being a 24 hour eye sore
- harbor the possibility of a 14 mile wide explosive flash fire due to an accident of terrorist attack.
- be visible from all elevations in malibu from downtown Malibu all the way to Port Hueneme.
- require a "security zone" of 2.3 miles around it. (to protect from terrorism, accidents etc) which is in the same shipping channel where 10,000, container ships and oil tankers use annually.

There are many more negative impacts than the above "official" ones disclosed by the federal and state study.

PLEASE do not allow this to go forward. We, the citizens of Southern California will fight this project until it is derailed. Our money and time can be spent on projects that truly will improve the quality of life in Southern California rather than just provide an opportunity for foreign Companies to sell us gas that they and we do not need.

Sincerely, Paige Eagle
7117 alvern st
Los angeles CA 90045

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

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Sincerely, Sea A Earner 6085 Paseo Cyn Dr. Malibu, CA 90265

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

May 27, 2006

Division of Environmental Planning and Management

100 Howe Avenue, Suite 100-South Sacramento, CA 95825-8202

California State Lands Commission

Cabrillo Port LNG Terminal

State Clearinghouse No. 2004021107

Dear Mr. Sanders:

Mr. Dwight Sanders

I am one of the millions of people throughout southern California who rely upon a ready supply of clean burning and efficient natural gas. I am concerned about its increasing price, and support expanding the state's supply of natural gas. I also understand that natural gas plays a critical role in our state's and our region's clean air strategies.

I support the Cabrillo Port LNG facility to provide new supplies of natural gas to California that will also serve the state's serve clean energy and clean air goals.

I would like to commend the State Lands Commission and its staff for the time and effort invested to comprehensively evaluate the environmental impacts of the proposed offshore facility. Cabrillo Port. I am glad to see that the Commission has recently released a revised draft environment impact report that is responsive to public commentary. This revised DEIR has been substantially re-written with additional data incorporated and much new, additional information from numerous studies and recent surveys concerning biological resources, water resources, endangered species, oak trees, cultural resources, and other important issues. Importantly, this report explains why Cabrillo Port is an environmentally sound project and shows how the proposed facility will be operated safely.

I believe that California needs an LNG delivery option, and I hope that Cabrillo Port will be permitted and operating as soon as possible.

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Jack E. Easterbrook 5345 Vineyard Rd.

Santa Barbara, CA 93111

P475-1

Section 1.2.3 contains updated information on natural gas needs in California. Forecast information has been obtained from the California Energy Commission.

P475-2

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

P475-3

Sections 4.7.4, 4.8.4, 4.9.4, and 4.18.4 discuss these topics.

P475-1

P475-2

P475-3

2006/P050

From: MeredithInc@aol.com

Sent: Monday, May 08, 2006 3:24 PM **To:** BHPRevisedDEIR@slc.ca.gov

Subject: NO LNG PLANT OXNARD/MALIBU area

Mr. Dwight Sanders:

As a resident of Oxnard for 43 years I've seen unbelievable growth in this area. We have noise/air pollution; overcrowded schools; horrific traffic; bulging beyond the maximum medical facilities.

Now we have LNG breathing down upon us. Simply put: I and my family DON'T WANT THIS because it is a big polluter threatening our homes, schools, environment and our security. Note we have Ventura County Navy Base (Pt. Mugu/Port Hueneme) that provides SECURITY, logistics and training support to numerous troops presently engaged in the "war" effort. These bases sit in the middle of this proposed venture. Infact both bases overlook the Pacific ocean; one base represents "Naval Air" and the other "Naval Sea Systems Command," Washington, D. C.

Think seriously about this and register a big NO on our behalf. We don't want the LNG. After almost 44 years living here, if the vote goes YES we will take our family and move out of California.

Beverly Meredith Eck Oxnard, California P050-1

Sections 4.6.4 and 4.18.4 discuss the Project's potential impacts to air and water quality, respectively. Section 4.2 and Appendix C contain information on public safety.

The Department of Defense, including the Navy at Point Mugu, has been consulted about this Project. Their input has been integrated into the EIS/EIR.

P050-2

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

P050-1

P050-2

P378

April 19, 2006

Dwight Sanders State lands commission, 100 Howe Avenue Suite 100 South Sacramento California 95825-8202

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Sincerely,

2006/P378

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

P360-1

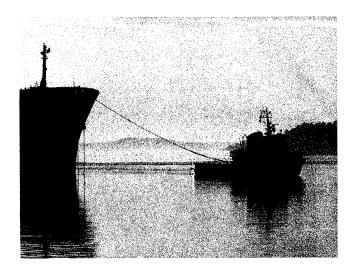
P360-2

SIGTTO

Society of International Gas Tanker & Terminal Operators Ltd

Safe Havens for Disabled Gas Carriers

An Information Paper For Those Seeking a Safe Haven and Those Who May Be Asked to Provide It



Third Edition, February 2003

P360-1

Lauraine Effress submitted this report to the California State Lands Commission as a supplement to her oral testimony provided at the Public Hearing evening session on April 19, 2006, in Oxnard, California.

P360-2

Thank you for the information, which will be taken into account by decision-makers when they consider the proposed Project.

Safe Havens for Disabled Gas Carriers

A document aiming to encourage the sharing of information among the operators of Gas Terminals

The Society of International Gas Tanker and Terminal Operators is a non-profit making organisation dedicated to protect and promote the mutual interests of its members in matters related to the safe and reliable operation of gas tankers and terminals within a sound environment. The Society was founded in 1979 and was granted consultative status at IMO in November 1983. The Society has over 100 companies in membership, who own or operate, about 95% of world LNG tankers and terminals, and about 50% of world LPG tankers and terminals.

Revised, February 2003
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FOREWORD

A ship in distress is usually in a condition where outside assistance is required to supplement the resources available on board to deal with the abnormal situation. A distress situation may have many facets ranging from disablement of power and/or steering to more fundamental damage to the hull or cargo system brought about by stress of weather, fire or other abnormal condition. Thus, the safest place for a ship in distress is in sheltered waters where the necessary external assistance can be brought to bear to bring the situation under control. Once under control, plans can then be made for the long term rectification of the situation, damage or other factors causing the distress situation.

In many cases, the ability to move the vessel to a safe, sheltered location is the most important single contribution that a port or coastal authority can make but this should be done in the full understanding of the risks that attach to the damaged condition of the ship.

Liquefied gas tankers have unique construction features and their cargoes have unique properties that set them apart from other classes of ship and other categories of hazardous cargo.

This document describes the most important features of gas tankers and gas cargoes for those who may possibly become involved in seeking or granting a temporary refuge for such a ship, or be responsible for the contingency planning for such an event.

This edition also includes details of actual incidents involving gas tankers.

1. Characteristics of Liquefied Gas Cargoes and of Gas Tanker Construction and Operation

1.1 Liquefied Gas Transportation

A liquefied gas is a substance that at ambient pressure and temperature is a gas but which, in order to store it or transport it economically with a much-reduced volume, is liquefied by the application of pressure or by cooling - or by a combination of both. The International Maritime Organisation (IMO), for the purposes of the Gas Carrier Codes, relates vapour pressure to temperate and has adopted the following definition for liquefied gases carried by sea:-

Liquids with a vapour pressure exceeding 2.8 bar at a temperature of 37.8 degC.

Liquefied gas is transported by sea under one or other of the following conditions.

- a) Fully Pressurised Under pressure, but at ambient temperature.
- Refrigerated, Semi-pressurised.- Under some pressure, but cooled below ambient temperature.
- c) Fully Refrigerated At slightly above atmospheric pressure.
- d) Liquefied Natural Gas (LNG) Liquid natural gas, insulated at cryogenic temperatures and slightly above atmospheric pressure.

In all four methods of carriage the cargo liquid is at or near the boiling temperature associated with its pressure. In the fully pressurised method, boil-off gas is wholly contained by the pressure generated and the pressure vessel tanks are designed to accept the pressure related to any ambient temperature, which the ship may encounter. In the two refrigerated methods, the pressure is maintained within the cargo tank designed pressure range by the cooling provided by the evaporation of boil-off gas. In the case of Liquefied Natural Gas (LNG), the boil-off gas is used as fuel in the ship's boilers but for other refrigerated liquefied gas cargoes the boil-off gas is reliquefied and returned to the cargo.

1.2 Structural Strength of Gas Tankers.

Gas tankers are constructed in accordance with successive "Gas Carrier Codes", agreed by governments internationally under the auspices of the International Maritime Organisation (IMO).

These codes recognise the potential hazards posed by liquefied gas cargoes and impose extensive and specific standards for their construction and subsequent operation.

Cargo tanks have to be constructed to withstand the high pressures or low temperatures. Hence gas tanker cargo tanks are either, exceptionally robust and strongly resistant to impact damage, or flexible and able to distort without rupture.

2006/P360

Perhaps more importantly, cargo tanks are independent of ships' hull structures; being protectively located within ships' structures, above a double bottom and in board of the outer hull.

As a result gas tankers enjoy an inherent level of security and greater structural integrity than that found in most other classes of ship and demonstrate an exceptional resistance to grounding and collision damage.

Furthermore, ballast water cannot be carried in a gas tanker's cargo tanks when empty, nor in compartments immediately adjacent to cargo tanks. Consequently ballast spaces are provided in double bottoms or in double hulls. This gives the gas tanker exceptional reserves of buoyancy.

To date there has never been an uncontrolled release of cargo from a gas tanker as a result of a grounding or collision, and even in cases where the outer hull has been penetrated only rarely has the ship sunk.

Note: During an enquiry into the safety of the Canvey Island Methane Terminal, in 1976, concern was expressed for the consequences of a spill of LNG leading to brittle fracture of a tanker's hull, with subsequent escape of LNG, a catastrophic failure of containment tanks, leading to fire and explosion. The report of the inquiry concluded, on this point:

"Event trees were used to analyse the various sequences of events which might follow a major spill of LNG from the transfer system......Making a number of conservative assumptions where uncertainties existed in the analysis, it was estimated that an initial major LNG spill was most unlikely, but were it to occur there would be only a 1% chance that the accident would escalate to result in failure of a cargo tank and release of larger quantities of LNG."

1.3 Flammability of Gas Cargoes

Liquefied gases transported by sea fall into two categories. Those whose vapours are flammable when mixed with air and those whose vapours are both flammable and toxic. The first category is the most common and includes the hydrocarbons, Butane, Butadiene, Propane, Propylene, Ethylene and Liquefied Natural Gas (LNG). The second category is the chemical liquefied gases, Vinyl Chloride Monomer (VCM), Methyl Chloride, Ammonia and Propylene Oxide.

In all methods of carriage, the cargo is at a pressure above atmospheric with ullage spaces above the cargo containing only cargo vapour. A flammable mixture with air, therefore, cannot exist within the cargo containment when cargo is aboard, being loaded or at any other stage of operation. Void spaces surrounding the cargo containment are continuously and automatically monitored for vapour leakage and, in many cases, may be filled with inert gas. Operational procedures maintain this non-flammable condition within the cargo containment and the surrounding void spaces on the ballast voyage.

Prospects for an explosion of flammable gas within a gas carrier's hull are therefore extremely remote.

To date there has never been an explosion of a gas cargo as a result of fire on board a gas tanker.

Because of their rapid and complete evaporation, when exposed to ambient pressure and temperatures, these gasses generally present no threat of any water pollution.

1.4 Characteristics of Gas Cargoes

As with all liquids, the temperature of the liquid surface determines the absolute pressure exerted by its vapour in immediate contact with the liquid. In the carriage of liquefied gases the vapour of the liquid is virtually the only gas within the cargo containment and the temperature of the surface of the cargo therefore wholly determines the absolute pressure within the containment system.

Vapour pressure/temperature characteristics of liquefied gases carried at sea varies over a wide range. For example, Butane at the lower end of the range has a vapour pressure equal to atmospheric pressure at a temperature of -1°C and a vapour pressure equal to 5 times atmospheric pressure (5 bars) at 45°C, the highest temperature it is ever likely to be transported. Propylene, at the top end of the range transported in LPG carriers, has a vapour pressure equal to atmospheric pressure at about -48°C and a vapour pressure of about 19 bars at 45°C. Butadiene, VCM, Methyl Chloride, Ammonia, Propane and Propylene Oxide have intermediate vapour pressure characteristics in ascending order.

The cargo containment in fully pressurised ships is designed for the maximum pressure of the cargo at the highest ambient temperature envisaged of 45°C. In fully refrigerated ships, the cargo containment is designed for the lowest temperature of the cargoes to be carried when they are at near atmospheric pressure.

All the above cargoes may be carried under any of the first three conditions defined in paragraph 1.1 above. Ethylene and LNG, however, cannot be carried under pressure alone, at ambient temperatures, and must be refrigerated. Ethylene is usually carried in the refrigerated, semi-pressurised condition in specialised ships with cargo containment and reliquefaction plant capable of accepting and maintaining the cargo in its fully refrigerated condition (-104°C). LNG, which is predominantly Methane, is carried only in its fully refrigerated condition (-161°C) in highly insulated tanks at slightly above atmospheric pressure. While in all other cases of refrigerated carriage the boil-off gas is reliquefied and returned to the cargo, the boil-off gas from LNG is not re-liquefied but is used as a fuel in the ship's main boilers.

Table 1.1 below illustrates some properties of selected gas tanker cargoes.

PRODUCT	BOILING POINT °C	VAPOUR DENSITY REL TO AIR	FLASH POINT °C	AUTO- IGNITION TEMP °C	FLAMMABLE RANGE % Volume
Methane	-162	0.55	-175	595	5.3 - 14.0
Ethylene	-104	0.975	-150	453	3.0 - 34.0
Propane	-42	1.55	-105	468	2.1 - 9.5
N butane	-0.5	2.09	-60	365	1.5 - 9.0
I butane	-12	2.07	-76	500	1.5 - 9.0
Vinyl chloride	-14	2.15	-78	472	4.0 - 33.0
Ammonia	-33	0.59	-57	615	14.0 - 28.0
Ethylene Oxide	10.7	1.52	-18	429	3.0 - 100.0
Propylene	-48	1.48	-108	453	2.0 - 11.1

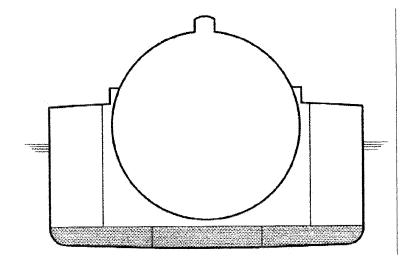
Table 1.1 - Properties of Gas Cargoes

2. Types of Gas Tanker.

2.1 Fully Pressurised Ships.

These carry their cargo in steel pressure vessels designed for working pressures of up to 20 bar. The ships tend to be small, generally of less than 2,500 m³ cargo capacity, but some with capacities up to 4,000 m³. The tanks are spherical, cylindrical or lobed and are structurally independent of the ship's hull and rest on supports or saddles built into the ship's structure. The inherent strength of the pressure vessels, their location well inboard from the ship's side and their protection by the double bottom ballast space makes this type of ship very robust with much reserve buoyancy in the damaged condition. Since the containment vessels are designed to accept the cargo vapour pressure at the highest ambient temperatures to be encountered in the area of trading, the cargo will remain contained indefinitely without release of vapour even though the ship may have lost all power – or even sunk.

Diagram 1 - Fully Pressurised LPG Carrier

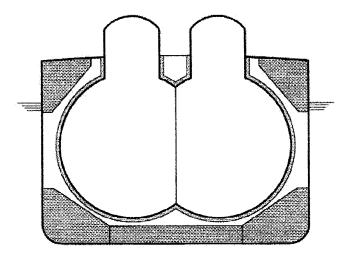


2.2 Refrigerated, Semi-pressurised Ships

In these ships the cargo is carried in pressure vessel cylindrical tanks designed for operating pressures which may be up to 7 bar and constructed of special grade steel suitable for the cargo carriage temperature. The tanks are insulated to minimise heat input to the cargo. The required cargo temperature is maintained by vaporisation, which is reliquefied and returned to the cargo tanks. These usually are larger than the fully pressurised type and have cargo capacities up to 15,000 m³. As with the fully pressurised ship, the cargo tanks are of pressure vessel construction and similarly located well inboard of the ship's side and also protected by double bottom ballast tanks. This arrangement again results in a very robust and inherently buoyant ship. Maintenance of the required cargo temperature and pressure in normal operation depends upon the availability of the re-liquefaction plant.

In the case of a total power loss on a disabled ship, the cargo temperature and pressure would slowly rise (because the re-liquefaction plant would also be inoperative. It might then become necessary, but only after a prolonged absence of power (some days), to relieve the tank pressure and cool the cargo by controlled venting of the boil-off gas.

Diagram 2 - Semi-pressurised LPG Carrier



2.3 Fully Refrigerated LPG Ships.

These are generally large ships of from 5,000 m³ to 100,000 m³ cargo capacity. They are usually suitable for carrying the full range of hydrocarbon liquid gas from Butane to Propylene and may be equipped to carry chemical liquid gases such as Ammonia or Vinyl Chloride. Cargoes are carried at near ambient pressure and at temperatures down to 50°C. Re-liquefaction plants are fitted, with substantial reserve plant capacity provided – being required by the IGC Code.

The cargo tanks do not have to withstand high pressures and are therefore generally of the free standing prismatic type, robustly internally stiffened and constructed of special low temperature resistant steel. All ships have substantial double bottom spaces and some have side ballast tanks. In all cases the tanks are protectively located in-board and at least 760 mm from the outer hull. The ship's structure surrounding or adjacent to the cargo tanks is also of special grade steel in order to form a secondary barrier to contain safely any cold cargo should it leak from the primary containment.

Since the pressure range of such tanks is limited to about 0.7 bar, a fully refrigerated ship with prolonged loss of power for its re-liquefaction plant may require to resort to controlled venting of gas in order to maintain the cargo at its required temperature and pressure. In any case, all liquefied gas cargo tanks, whether they be of the pressure vessel type or rectangular, are provided with safety relief valves amply sized to relieve boil-off in the absence of re-liquefaction and even in conditions of surrounding fire.

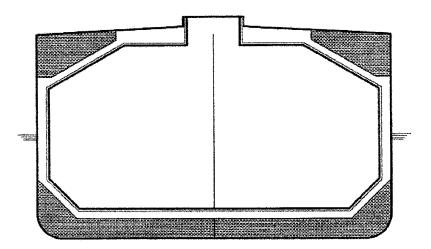


Diagram 3 - Fully Refrigerated LPG Carrier

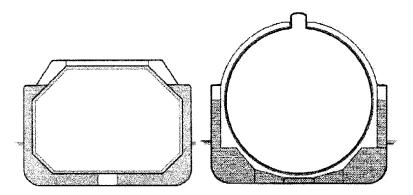
2.4 LNG Carriers

Ship cargo capacities range from 25,000 m³ to 145,000 m³. Cargo tanks may be free standing spherical, and constructed on pressure vessel principles with some limited pressure range capability. Alternatively, they may be prismatic of either the free-standing, self-supporting type or of the membrane type. In the latter case, the cargo is contained within thin walled tanks of Invar or stainless steel. The tanks are anchored in appropriate locations to the inner hull and the cargo load is transmitted to the inner hull through the intervening thermal insulation. All LNG carriers have a watertight inner hull and the prismatic tank designs are required to have a secondary containment capable of safely holding, at least for a period of 15 days, any leakage of cargo from the primary containment. Because of the simplicity and reliability of stress analysis of the spherical containment designs, a secondary barrier is not required but splash barriers and insulated drip trays protect the inner hull from any leakage that might occur in operation.

Existing LNG carriers do not re-liquefy boil-off gases. This gas is used as fuel for the ship's boilers. Providing its boilers remain operative, a disabled LNG tanker would be able to continue to burn the boil-off. If, however, this is not possible, the pressure range of the cargo tanks would permit containment of the boil-off only for a period of some hours; after which controlled venting to atmosphere would be necessary.

However natural gas vapour, once warmed above -110°C, is lighter than air and very quickly disperses into the atmosphere. Some LNG carriers are fitted with heaters that can raise the temperature of the vented boil-off gas to ensure its very rapid dispersion.

Diagram 4 - LNG Carriers



3. Casualty Experience

The following brief outlines of actual casualties, selected as being among the most serious which have occurred, provide some practical illustrations of the contributions to the successful handling of some of the casualties by the granting of a safe haven.

October 1966 - Mundogas Oslo

A 3,500 m³ refrigerated, semi-pressurised LPG carrier. Loaded with Ammonia and on voyage from Fredericia, Denmark to Nystad, Sweden, she was in collision in dense fog. The colliding ship struck the LPG carrier at right angles and penetrated her hull in way of No.2 (aftermost) cargo hold which flooded. The ship listed heavily and, four hours after the collision, part submerged with her stern resting on the sea bottom. Salvage attempts were frustrated by almost continuous bad weather and by the onset of ice conditions. Finally, after three and a half months of battering, the forepart of the ship also submerged. During the salvage attempts some cargo gas escaped through the cargo tank relief valves and some liquid cargo was discharged by the Salvors. During the initial submergence of the aft part and the final floundering of the whole ship, no cargo was released. Since the sinking, there has been no indication of cargo release though this may have taken place gradually through the years and dispersed innocuously in tides and winds.

It is noteworthy that this has been the only occasion to date of a LPG carrier sinking after collision. The ship was an early design of semi-pressurised carrier and did not have the in-built stability in damaged conditions which is now required by Classification Societies' Rules for more recently built liquefied gas carriers. A modern ship of this type, built to these now universally accepted Rules, is designed specifically to withstand such collision damage as the *Mundogas Oslo* suffered and remain stably afloat.

March 1973 - World Bridgestone

A 74,000 m³ fully refrigerated LPG carrier. Loaded with Butane and Propane for Japan, she was in collision with an oil tanker in the Malacca Straits. The hold around No. 1 cargo tank flooded but with no immediate threat to the cargo containment. The ship was accepted into Singapore waters where temporary repairs were carried out. These completed, the ship proceeded to Japan for discharge of cargo and permanent repairs.

November 1974 - Yuyo Maru 10

A combination LPG/Oil Products carrier with four fully-refrigerated LPG centre tanks of about 47,500 m³ total capacity and with wing tanks of normal oil tanker construction capable of carrying 32,000 m³ of oil products. While loaded with a full cargo of Butane and Propane in the centre tanks and of Naphtha in the wing tanks, she was in collision with a bulk carrier, Pacific Ares, in Tokyo Bay. Naphtha spilled from an opening of 24 metres in length and extending to below the water line in No. 1 Starboard Wing Tank.

The Naphtha immediately caught fire and flames enveloped the whole of the Pacific Ares and the starboard side of the Yuyo Maru. Twenty-nine of the crew of the bulk carrier and five men on the gas carrier were killed. LPG vapour escaping from the safety valves and ullage fittings of Nos. 1, 2 and 3 LPG tanks ignited and burnt continuously at the points of emission. The Yuyo Maru continued to burn and fire spread to Nos. 2 and 3 Starboard Wing Naphtha Tanks with sporadic eruptions of flame. Despite major efforts by firefighting tugs, it was not possible to extinguish the fires. Finally, after 19 days, the ship, still burning and having been towed far out to sea, was sunk by torpedo and gunfire.

It is noteworthy that despite the considerable initial collision damage, the fierce and protracted burning of the Naphtha cargo in and around the ship and the ignition of the gas escaping on deck from the LPG tanks, no rupture or explosion of the LPG cargo tanks took place and there was no release of the liquefied gas cargo either into the hull or to the sea until the final bombardment and sinking,

October 1978 - Danian Gas

A 26,000 m³ fully refrigerated LPG carrier. While discharging Propane at Donges, France, cargo leaking from a booster pump located on deck caught fire. The fire was controlled to the immediate vicinity of the pump and then extinguished with shore assistance. With all re-ignition sources quelled, the ship was towed off the jetty to an anchorage and the defective pump repaired. The ship then returned to the jetty under her own power and completed the discharge of cargo.

June 1979 - El Paso Paul Kayser

A 125,000 m³ LNG carrier. While loaded with 99,500 m³ of LNG, the ship ran at speed onto rocks and grounded in the Straits of Gibraltar. She suffered heavy bottom damage over almost the whole length of the cargo spaces resulting in flooding of her starboard double bottom and wing ballast tanks. Despite this extensive damage, the inner bottom and the membrane cargo containment maintained their integrity. Five days after grounding, the ship was refloated on a rising tide by discharge of ballast by the ship's own pumps and by air pressurisation of the flooded ballast spaces. With the permission and co-operation of the Spanish Authorities, the ship was towed to an anchorage in the shelter of Algeciras Bay where shortly afterwards she was relieved of her full cargo by ship-to ship transfer to a sister LNG carrier moored alongside.

During the re-floating and subsequent cargo transfer at anchor, the ship was attended by a very adequate complement of salvage facilities and gas carrier expertise. The procedures and considerations which were brought to bear to ensure the successful conclusion to this first instance of a serious grounding and ship-to-ship LNG cargo transfer have been made widely available to the industry and have proved a valuable learning exercise. Subsequent to the cargo transfer, the ship was gas-freed and inerted at the anchorage and was towed to Lisbon for temporary repairs, whereafter she proceeded under her own power to Dunkerque for full repair.

January 1980 - Regitze Tholstrup

A 388 m³ fully pressurised LPG carrier which, loaded with Butane, was driven ashore off Lame, Northern Ireland, in heavy weather and was holed in her engine room. Hoses were laid to the shore and cargo pumped to road tankers. Empty of cargo, the ship was refloated on a rising tide two days after grounding. There was no damage to the pressure vessel cargo tanks and no immediate danger of cargo spillage.

September 1980 - Mary Else Tholstrup

A 629 m³ fully pressurised LPG carrier, loaded with Butane, ran aground off Roche's Point, Southern Ireland. Although the ship suffered extensive bottom damage, the cargo pressure vessel containment was unaffected. The ship was refloated on a rising tide two and a half hours after grounding and was granted safe anchorage in nearby Whitegate Roads. Here the cargo was transferred to the *Ulla Tholstrup*, a small semi-pressurised LPG carrier of 918 m³ capacity. Subsequently, the damaged ship was gas-freed at the anchorage and towed to dry dock for repair.

October 1980 - LNG Libra

A 125,000 m³ LNG carrier. While on passage from Indonesia to Japan the propeller tail shaft fractured, leaving the ship without propulsion. The Philippine Authorities granted a safe haven in Davao Gulf to which the ship was towed. Here, with the ship at anchor in sheltered water, the cargo was transferred in 32 hours of uneventful pumping to a sister ship moored alongside. The *LNG Libra* was then towed to Singapore, gas-freeing itself on the way, and there was repaired. In this casualty there was, of course, no damage to the ship's hull and no immediate risk to the cargo containment. Nevertheless, it was recognised by the ship's operating management and by the Philippine Authorities that the hazards attaching to a disabled and loaded gas carrier should be terminated as soon as practicable by the ship being relieved of its cargo. The uneventful and expeditious LNG cargo transfer to another ship showed again the safety and reliability of this procedure when properly conducted in sheltered water.

December 1980 - LNG Taurus

A 125,000 m³ LNG carrier. Approaching Tobata Port, Japan, to discharge, the ship grounded in heavy weather with extensive bottom damage and flooding of some ballast tanks. After off-loading some bunkers and air pressurising the ruptured ballast spaces, the ship was refloated four days after grounding. Despite the extent of bottom damage, the inner hull remained intact and the spherical cargo containment was undisturbed. After a diving inspection at a safe anchorage, the ship proceeded under its own power to the adjacent LNG reception terminal and discharged its cargo normally. The ship then sailed to Nagasaki for repairs, gas-freeing itself on passage.

October 1984 - Gaz Fountain

This vessel of 40,232 m3 was built in 1969 and can be considered to be one of the first generation of fully refrigerated LPG carriers. She had loaded 18440 tonnes of propane and butane in three prismatic tanks. She was on passage from Ras Tanura to Fujairah when she was attacked by Iranian aircraft with air to ground missiles, three of which hit the vessel, causing severe damage. A hole 3m x 2m was blown in the roof of No.3 tank and much of the cargo pipe-work and electrical cabling on deck was severely damaged. As would be expected a serious fire developed on deck and subsequently spread to the accommodation, but luckily not to the engine room. The crew abandoned-ship and two days later a salvage team arrived on the scene and extinguished the fires with powerful water jets and foam from a salvage tug. The vessel was then towed to a safe anchorage some 15 miles off Dubai and during this period work started on securing the vessel's gas tight integrity. Services were supplied by barge, until the vessel's engine room could be recommissioned and six weeks later 17,204 tonnes of the original cargo had been discharged by STS transfer to the LPGC Ribagorca, using Gaz Fountain's own pumps. The vessel was then gas freed prior to repairs.

Captain J Carter of P&O Marine Safety Services presented the full story of this incident at the 1985 Gastech Conference, at Nice.

1985 - Jatoba

The vessel, a 4100 m3 semi-pressurised LPG carrier with 3 cylindrical tanks, caught fire whilst discharging at Recife. The fire burned for 2 days causing severe damage to the vessel and No.3 tank was reported to have BLEVED. However, when the fire was extinguished the engine room and No.2 tank was reported to be intact, making it highly unlikely that a BLEVE had occurred.

April 1990 - Val Rosandra

The vessel, a 2999 m3 semi – pressurised LPG carrier with cylindrical tanks was discharging propylene at Brindisi when a fire started between the compressor house and No.3 tank. The vessel was towed out to sea with No.3 tank dome burning. This continued to burn for a further 22 days after which explosive charges were laid to breach the domes of the four remaining tanks and allow the gas to burn off. This situation continued for a further 16 days until the vessel was scuttled.

May 1997 - Igloo Moon

The ship was en route from Saudi Arabia to Houston with a full cargo of 6,600 tonnes of butadiene when she struck a coral reef off Key Biscayne. The initial diver's report revealed that a two-foot thick layer of sand covered the reef on which double-hulled Igloo Moon was resting over 75% of her length. Furthermore, three of the ship's double-hull starboard tanks and the pipe duct were flooded, the rudder was hard aground and the steering gear was wrecked. Fortunately, there was no visible oil spill and the ship's cargo

tanks were intact.

In considering this report, and the optimum course of action to take, the emergency response team was able to call on comprehensive data for Igloo Moon held on computers at the GL head office in Hamburg. Because it holds details of the ship¹s hull form and watertight compartmentalisation, and dimensions and scantlings of hull structural elements, the Emergency Response Service database enables rapid calculation of buoyancy, stability, residual strength and the amount of oil remaining on the ship. With this database the team can provide a computer-assisted investigation of an accident within three hours of it being reported.

On this occasion the response team, working in conjunction with the US Coast Guard, laid an oil barrier around the ship as a first step and then began to pump fuel oil from the double-hull tanks into the higher slop tanks. The recovery operation was then begun on the basis of further information on the state of the ship before the accident and the team's recommendations.

Worsening weather hindered the refloating of the ship as the arrival of a barge to take off bunkers was delayed and the damaged ship had to take on ballast. The Emergency Response Service team provided continuous technical assistance, including an evaluation of the vessel's stability and strength as the gas tanker moved on the reef and had to be fixed at the stranding position by being, alternatively, ballasted and lightened. Finally, as the weather cleared, a lightening tanker was brought into position and 1,360 tonnes of cargo were transferred, allowing Igloo Moon to float free. Following an inspection of the bottom damage and calculation of the hull's residual strength, the ship was towed to a US shipyard for repair via Freeport in the Bahamas.

March 1999 - Multitank Ascania

Although this incident involved a chemical tanker and not a gas carrier, it is worthy of note as an example of co-operation between various agencies, resulting in a successful outcome to what may well have been a tragic incident.

The 3,400 dwt chemical carrier was on passage through the Pentland Firth, Scotland, with a cargo of 1,850 tonnes of vinyl acetate monomer, when fire broke out in the engine room; resulting in the vessel being disabled in a force 8 gale.

Salvors were appointed by the owners, who in turn sub-contracted a specialist chemical advisory company to assist in the operation. Due to the flammability and toxicity of the cargo the Maritime and Coastguard Agency established a 5-km exclusion zone around the vessel, which resulted in several hundred people being evacuated from coastal villages. At first light the following day salvors with thermal imaging equipment visited the vessel by helicopter and established that the fire was receding.

Following a series of discussions between interested parties it was agreed to tow Multitank Ascania to Scapa Flow in Orkney, to undertake a ship to ship transfer. When the vessel arrived in Scapa the local fire brigade confirmed that the fire was out and a detailed risk assessment was undertaken before the STS transfer of cargo was authorised. The cargo was successfully transferred, following detailed planning, using the vessels own deep-well pumps. A Salvage vessel was in close attendance during this period, to provide electrical support and pollution cover. Twelve days after the fire broke out the vessel was handed back to her owners, with a gas free certificate, to be towed to Rotterdam for repairs.

October 1999 - 126,000 Membrane design LNG Carrier

A fully laden 126,000 Membrane design LNG Carrier experienced overheating of a shaft bearing (external strut), one day after leaving the load port, in a hurricane active area. Whilst the ship was able to proceed slowly, the decision was taken to preserve the bearing condition and tugs were employed to tow the vessel to a safe discharge port. After consultation between the vessel's owner, ship managers and the US Coastguard it was agreed that the vessel should continue to its original US discharge terminal. The vessel safely berthed using its own power supplemented with additional tugs, discharged its cargo without incident and then proceeded safely under tow to a repair port.

September 2001 - 125,000 Moss Rossenberg design LNG Carrier

A 125,000 Moss Rossenberg design LNG Carrier experienced an overfilling of a cargo tank, during cooldown operations, at a US LNG Terminal. The spillage of LNG resulted in cracks appearing in one tank cover. The cargo containment system was not damaged nor was there any structural damage to the vessel. After a joint safety inspection by the Terminal, Classification Society and the US Coast Guard, the vessel was allowed to resume cooldown and cargo operations. The vessel discharged its entire cargo without further mishap.

November 2002 - 75,800 m3 LPG Tanker

The vessel, a 75700 m³ fully refrigerated LPG carrier with prismatic tanks was at anchor off Yantian, China, part-loaded with approximately 10,000 tonnes of propane and 10,000 tonnes of butane, when a fire started in the engine room. Despite attempts at fire fighting by the crew, including the release of the vessel's CO2, the vessel was abandoned and the fire engulfed the engine room and accommodation.

The crew was rescued, unharmed, by the local authorities and the fire was eventually extinguished/burned out after about 3 days. Efforts were concentrated on preparing the vessel for safe ship to ship transfer (STS) using external power. The lapsed time without refrigeration had increased the vapour pressure in the tanks to relatively high levels. The STS was carried out safely and efficiently. The vessel was then inerted whilst still

The STS was carried out safely and efficiently. The vessel was then inerted while at anchor.

4. The Need for a Safe Haven

Gas tankers are robust and highly resistant to grounding collision and fire. Their cargoes, in their liquefied state, are non flammable and notwithstanding their volatility and flammability (when diluted with air), the design and construction of gas carriers renders both escape and ignition of gas, extremely remote possibilities. Such ships do not in fact pose the dire threats that so often are imagined.

Nevertheless, a gas tanker deprived of power will sooner or later be obliged to vent gas. It is therefore essential that disabled tankers be afforded early and safe opportunities to receive support form the shore and to effect repairs.

Entry to a safe haven – which might be an anchorage in relatively sheltered water – will usually be requested for the ship to:

- · conduct an underwater survey, with divers.
- provide safe access for shore personnel with equipment or spare parts.
- allow tugs or service craft alongside for temporary power, pumping or compressed air services
- · to effect temporary repairs to outer hull damage.

All these or may be impossible to provide in the open sea.

Denying shelter to a disabled tanker condemns ship and crew to an extended period of jeopardy – one that will slowly increase with time. Denying shelter will also increase the risk to coastguard and other agencies involved in the saving of lives, should the situation on board deteriorate to the extent that evacuation of the crew is necessary.

Granting sanctuary to disabled ships is an established custom of the sea. Only the perception of the hazardous nature of some cargoes now carried, may create a reluctance on the part of some authorities, to permit an area within their jurisdiction to be used as a place of refuge for a disabled gas tanker.

While the risk attaching to these ships can never be eliminated altogether, with informed judgement and careful planning of operations they are entirely manageable within acceptable bounds.

5. The Role of SIGTTO

SIGTTO is not an emergency response organisation equipped to deal with gas incidents. However, the organisation represents approximately 95% of the LNG industry and about 50% of the LPG/Chemical Gas industry. Thus it has extensive contacts within member companies, external consultants specialising in liquefied gas and the wider industry. SIGTTO can be contacted as a conduit to specialist industry expertise which may not be available or known locally. It would be necessary for Port Authorities and others to agree commercial terms with consultants/companies providing such support.

6. Checklist

The following checklist may be a useful guidance in those aspects, which might properly be considered in the seeking and granting of a safe haven for a disabled gas carrier.

- 6.1 What cargo is on board? Has specialist advice been sought in respect of the cargo and it's properties? Are port services, salvors and all parties involved aware of the cargo properties?
- 6.2 Are the cargo tanks and other elements of the containment system intact?
- 6.3 Is the ship venting gas? Is the ship likely to vent gas during the period in the safe haven? What will be the vented gas and what are its dispersal characteristics? Are dispersion modelling tools available?
- 6.4 Is the ship damaged? Does this compromise its ability to manoeuvre or otherwise put other port users at risk?
- 6.5 What activities are planned and what services are to be employed to restore the ship to a seaworthy condition? Is STS transfer equipment available if required?
- 6.6 When is it expected the ship will be seaworthy again?
- 6.7 Are the prevailing conditions, within the intended safe haven in fact suitable (in terms of shelter, other dangers and access to the tanker) for the intended repair and survey programme?
- 6.8 What contingency plans are required? Who will control the operation and how will the ship operator and port or public authorities co-operate together? Will customs and immigration clearance need to be facilitated for specialist equipment and advisers?

References

- British Gas LNG Terminal The Analysis of the Hazards of Ship to Shore Transfer, D M Lucas, D R Roe & D K Waterlow 4th International Symposium on Loss Prevention, 1983
- Ship-to-Ship Transfer Guide (Liquefied Gases), 2nd edition, 1995, published for the International Chamber of Shipping, Oil Companies International Marine Forum and the Society of International Gas Tanker and Terminal Operators LTD by Witherby & Co Ltd, 32-36 Aylesbury Street, London EC1R 0ET
- 3. The International Code for the Construction and equipment of ships Carrying Liquefied Gases in Bulk, (IGC Code) Published by the IMO
- A Contingency Planning and Crew Response Guide for Gas Carrier Damage at Sea and in Port Approaches - 3rd edition 1999 (ICS/OCIMF/SIGTTO)

SIGTTO London Liaison Office Reprinted February 2003 COMMENTS ON REVISED DEIR FOR CABRILLO PORT
-Lauraine Effress, 2831 Harbor Blvd.,Oxnard, CA 93035,
(805-985-6472)

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May 8, 2006

This submission is to be an elaboration on the comments I made at the public hearing in Oxnard on April 19th, 2006. I was unable to finish my comments at that time, so I will take this opportunity to elaborate on my remarks. Before I proceed to my original remarks, I want to add that I believe the decision on Cabrillo Port should be deferred in light of the additional submission by Woodside Energy. The Woodside project appears to have advantages over the BHP Billiton project in three important ways.

First, there is history with the regasification method that Woodside proposes to use. This method of regasfication, as you know, is being successfully used in the Gulf of Mexico by Excelerate. On the other hand, Cabrillo Port is a) to be run by a company with no LNG experience, and which recently "lost" a moored platform (though not an LNG regasification platform) in the Gulf of Mexico during a hurricane when it "was not supposed to happen;" b) it proposes to use a totally untried technology in an earthquake and storm prone region of the Pacific Ocean. Is not tried and successful better than untried with a company with one strike against it?

Second, the underwater regasifiction eliminates a good deal of the (controversial)air pollution discussed at length from by Cabrillo Port. Third, located further from shore, the Woodside project appears to present less potential danger, disruption and intrusion to the shipping lanes (as per diagrams of Cabrillo Port's sphere of influence.)

While I recognize that each project gets examined on its own merit, part of the EIR process is to evaluate the cumulative impact. Surely, the fact of the Woodside project in the wings and the now approved Alaska natural gas pipeline merits some consideration from both the Coast Guard and the State Lands Commission.

That said, my original remarks on April 19th had to due with BHP Billiton's lack of provisions for disabled tankers in section 4.3.1.4 of the Revised EIR, subtitled "Safety Measures." Specifically, the paragraphs that deal with a disabled tanker or FSRU.

Billiton is nonspecific regarding plans for such disabled vessels beyond any emergent situation. The applicant describes the anchorage of the FSRU and reviews alternative plans for towing both with or without power. He states that the vessel could be towed to a "safe and appropriate location for repair." What safe and secure

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The nature and extent of impacts associated with the Woodside Natural Gas Project cannot be predicted with any certainty at this time because the necessary environmental analyses have not yet begun; therefore, it cannot be considered as an alternative.

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

P424-2

Section 4.20.1.2 contains information on cumulative impacts of the Woodside project. The Alaska natural gas pipeline has not been approved.

P424-3

Section 4.3.1.4 contains additional and revised information on this topic under "Disabled Vessels and Anchorage."

P424-2

P424-1

P424-3

location? None is specified or implied. Moreover, according to the applicant, there are no facilities on the West Coast of North America capable of dry docking either an LNG carrier or the FSRU, if in fact, such were necessary.

The Society of International Gas Tanker and Terminal Operators (SIGTTO,) of which BHP Billiton is listed as a member, has published a summary and analysis of 17 selected casualty scenarios between 1966 and 2002 involving actual carriers of either LNG or LPG. This summary was given to Mr. Sanders at the April 19th hearing. SIGTTO notes that as Billiton has indicated gas carriers are resistant to grounding, collision and fire and their design renders the escape and ignition of gas a remote possibility. However, we all know that STUFF HAPPENS. According to SIGTTO, a gas tanker, deprived of power, will sooner or later be obligated to vent gas. How and when will that venting be done? The EIR makes no mention of plans for venting.

Furthermore, SIGTTO stresses that access to a safe harbor in **sheltered** waters is usually required to effect repairs and to restore the ship or(FSRU) to seaworthy condition. The applicant's plan appears to indicate that repairs, at least to the FSRU, can be made in place or further out on the open ocean. Tanker repair is not addressed (p.ES-17-bottom of the page claims potential effects of a tanker in transit accident were not considered because it would not affect the public, but we disagree. A disabled tanker on the high seas, of course, affects the public, though perhaps not the public on land.) And what about the disruption to the navy, the Coast Guard and the Port of Hueneme?

Contingency plans for safe harbor are needed. SIGTTO notes that without shelter to a ship in trouble, the jeopardy increases to the crew, the ship and to coast guard or other agency personnel involved in rescue and may eventually force the evacuation of the crew. They present 17 actual incidents, each dealing with a different ship disability such as the overfilling of an LNG tank, a grounded LNG tanker, and a propulsionless tanker due to a fractoring of a propeller tail shaft. Disability ranged from 2 days to 38 days. Most of the cases were non catastrophic, but there were instances of loss of life and one case necessitated the blowing up and sinking of the vessel. The point is, the problem does not go away once a fire is out or people rescued. The emergency can last a long time. Since BHP Billiton is a member of SIGTTO, it is puzzling that the EIR does not address the need for safe haven and arrangements for such.

P424-3 Continued

P424-3 Continued

P424-4

P424-4

Section 2.2.2.5 contains information on the FSRU's emergency depressurizing and venting systems.

The venting of LNG carrier cargo tanks, while at sea, is permitted by the International Maritime Organization's International Gas Carrier Code (IGC Code) (Chapter 7.1.1.5). However, USCG regulations prohibit cargo tank venting of natural gas in U.S. waters, except in emergencies (46 CFR 154.1836).

Should Cabrillo Port receive a Federal deepwater port license and a California State permit, the port operators will have to develop detailed emergencies procedures that will address this proposed scenario and incorporate them into the port operations manual. The operations manual must be approved by the USCG (by both the Coast Guard National Headquarters and Coast Guard Sector Los Angeles/Long Beach Command staffs) prior to the port commencing operations.

Any and all emergencies procedures (emergency response and evacuation plan, facility security plan, vessel transit plan) that would be implemented in the event of a disabled LNG carrier will be closely monitored and coordinated with the Coast Guard Captain of the Port/Officer in Charge, Marine Inspection serving as the Federal On Scene Commander for emergency response. This would include the FOSC authorizing cargo tent venting if it was critically necessary to ensure the safety of lives.

P424-5

As discussed in Section 4.3.1.4, "[s]pecific casualty scenarios would be addressed in detail in the contingency response/emergency procedures portions of the Cabrillo Port Deepwater Port Operations Manual that must be provided to and approved by the USCG before the facility becomes operational (33 CFR 150.15)." Section 4.2.7.3 contains additional information on this topic.

P424-5

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The proximity of the proposed site to the deep water port and the naval base, not to mention the ports of Los Angles and Long Beach (where they are developing facilities for the berthing of a supertanker,) would appear to provide ample opportunity to plan in advance for such occurrences, and secure written agreements. As safety officer for psychiatric hospitals, I was required to secure written agreements with other such facilities for the transfer of patients in an emergency. These agreements were used on several occasions, once during a huge wildfire at the state hospital and once when noxious gas was released at a hospital in Santa Barbara. It went smoothly because protocols were in place. It is infinitely easier to have an agreement in place than to try to work one out in the midst of a crisis.

Billiton does not want to be seen as burdening the operations of the Port of Hueneme. They stress that the crew ship out of Hueneme would not require a licensed pilot and that, after a number of trips in an out of Hueneme, the tug captains would be able to earn pilot exemptions so as not to burden the Hueneme pilots beyond the initial phases. But Billiton's failure to pre-arrange safe haven matters with Hueneme (among others) is, I believe, a serious oversight.*

Our community is no stranger to marine accidents. In addition to Alaska Air Flight 271 which I spoke about at the Scoping Meeting, last year, the tall ship Irving Johnson ran aground in Channel Islands Harbor just this past winter. We are told that the proliferation of storms and the changing currents have brought an excess of sand to our harbors. With all the marine, coast guard and military support, it took a week to refloat the Irving Johnson (photo attached) to the chagrin of the all the old salts in town. Emergency planning needs to address a fix that extends beyond the emergent time period and makes us think that BHP Billiton seriously understands the risks of this project.

*I am also concerned-as part of another matter- that these tug captains would be unlicensed pilots, which seems to add a) to the legal jeopardy in case of accident and b) to the feeling that corners are being cut with the quality of personnel. Another example is the 5 year interval in the safety refresher training. Even with annual training, in a crisis people forget. Emergency training needs to occur often in such a high risk milieu.

P424-5 Continued

P424-5 Continued

P424-6

Thank you for the information.

P424-7

Section 4.3.4 Impact MT-7 discusses this topic.

P424-6

P424-7

P424-8 Thank you for the information.

P424-8

1 of 4 3/23/2005 3:56 PM

April 25, 2006

Attention: Dwight E. Sanders, CA State Lands Commission

From: Octavio R. and RoseMarie Elias Re: State clearinghouse # 2004021107

Cabrillo Liquified Natural Gas Deepwater Port

ACCIDENT A happening that is not expected, foreseen or intended

An unpleasant and unintended happening sometimes resulting from negligence that results in injury, loss, damage, etc.(def. Websters)

We could add: results from human error, terrorist activity, defective equipment or incorrect data used to calculate the extent of a vapor cloud fire on an unknown, untested technology or experimental installation

30-MINUTE WARNING

The effect of an accident according to the revised EIR extends the *vapor cloud fire* up to 6.3 miles (<u>four times farther than originally thought</u>). What if the computer modules are wrong again? Commercial shipping, recreational boaters and us residents of Oxnard would have a <u>30-minute warning</u> to run, to drive, to hide, to move, to escape, to evacuate???

ON LAND

- a. There is no early warning alert system in place in Oxnard
- b. There is no easy evacuation from the beach neighborhoods Oxnard Shores/Mandalay Shores neighborhood, The Colony, Hollywood Beach and part of Mandalay Bay are connected by <u>bridge</u> to Oxnard proper.
 - 1. North on Harbor across the Santa Clara River
 - 2. East on both Wooley Rd and Fifth Street over the Edison Canal
 - 3. East on Channel Islands over the Channel Islands marina channel
- c. What is the average household age in these areas for evacuation in 30 minutes
- d. Have the elderly/handicapped been located, advised, planned for
- e. Has the increased traffic from hundreds of new homes under construction at Wooley/Victoria been addressed in case of evacuation

AT SEA

- a. How long does it take to turn a ship or a boat to get out of harm's way
- b. What mechanism is there for the safety of the crew of any vessel, facility, platform including those on the LNG tanker

Who has the financial responsibility for medical expenses or death benefits due to accident caused by this installation and/or tanker on land or sea?

We will appreciate your addressing our concerns. Thanking you in advance.

cc kkusano@comdt.uscg.mil, <u>ogginsc@slc.ca.gov</u>, <u>governor@governor.ca.gov</u>, <u>mike.chrisman@resources.gov</u>, <u>tt@calepa.ca.gov</u>, <u>sanderd@slc.ca.gov</u>

P029-1

Thank you for the information.

Table 4.2-2 identifies representative hazards and threats considered in the public safety analysis, including human error, terrorist activity, and defective equipment.

P029-1

P029-2

P029-3

The lead agencies directed preparation of the Independent Risk Assessment (IRA), and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C. Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results. Section 2.1 contains information on design criteria and specifications, final design requirements, and regulations governing the construction of the FSRU. The Cabrillo Port must be designed in accordance with applicable standards, and the U.S. Coast Guard has final approval. Section 4.2.4 contains information on Federal and State agency jurisdiction and cooperation. The Deepwater Port Act specifies performance levels that all deepwater ports must meet; Section 4.2.7.3 contains information on design and safety standards for the deepwater port. Section 4.2.8.2 contains information on pipeline safety and inspections. The EIS/EIR's analyses have been developed with consideration of these factors and regulations.

P029-2

Section 4.2.7.6 and the Independent Risk Assessment (Appendix C1) contain information on public safety impacts from various incidents at the FSRU. The analysis indicates that the maximum impact distance of an accident would involve a vapor cloud dispersion extending 6.3 nautical miles (7.3 miles) from the FSRU. The FSRU would be located approximately 12.01 nautical miles (13.83 miles) offshore; therefore, consequences of an accident involving LNG transport by carrier and storage on the FSRU would extend no closer than 5.7 nautical miles (6.5 miles) from the shoreline. Figure ES-1 depicts the consequence distances surrounding the FSRU location for worst credible events.

P029-6

P029-5

P029-4

As discussed above, no evacuation of the areas cited would be necessary as the consequences of an accident would not reach shore.

P029-4

P029-3

The Project has been modified since issuance of the October 2004



2006/P029

Draft EIS/EIR. Section 4.3.4 contains updated text on potential impacts on marine traffic and mitigation measures to address such impacts.

P029-5

Section 4.3.4 contains additional information on response by a ship or boat to warnings. Measures for the safety of crew of any vessel facility or LNG tanker are embodied in the various design standards, safety systems, and safety standards. Crew safety is regulated under OSHA and therefore not considered under NEPA and the CEQA. See Sections 2.2.2.5, 4.2.7.3, 4.3.1.4, and Appendix C3-2 for more information.

P029-6

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

4/17/06 12

Dwight E Sanders Calif. State Lands Commission Div. of Environmental Planning and Mgnt. 100 Howe Ave, Suite 100-South Sacramento, CA 95825-8202

Dear Mr. Sanders

As a responsible agency with permitting authority over Cabrillo Port LNG Project the information used to determine wind speed found in Vol.-II appendix C2 Sandia Review Independent Risk Assessment Pages 11 & 12 figures 2 and 3.

The information on wind speed is compared from the FRSU and a bouy (4653) In Santa Barbara Channel and states maximum wind speed is 12 knots with mean wind speed in the area of about 6-7 knots. BHP Billitons analysis is that the FRSU will produce approximately 270 to 280 tons of Smog-Producing air Pollution per year in the Oxnard area, as well as greenhouse gases aggravating global warming.

The wind speeds both maximum and average are much higher then indicated In the EIR according to the: National Weather Service, Oxnard, CA (805) 988-6610 -- Western Region Climate Center, (775) 674-7010.

This being the case, the 270-280 tons of pollutants produced yearly by the FRSU will be blown over Oxnard and other Ventura County cities, creating Dangerous health hazards that cannot be mitigated.

515 De Anza Way
Oxnard, CA 93033

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2006/P212

P212-1

Section 4.1.8.5 contains information on meteorology and climate in the Project area, including average wind speed and direction. Information on wind speed and direction is also summarized in Appendix C2. Data presented are from National Oceanic and Atmospheric Administration (NOAA) Buoy 46025 (Catalina Ridge), which is approximately 7 NM (8.05 miles) south of the proposed FSRU site. Of the three buoys nearest the proposed FSRU site (see Figure 4.1-1 for buoy locations), NOAA Buoy 46025 is the most exposed and has the longest data record (1982 to 2004). Information from NOAA Buoy 46053 was not used, as this buoy is located in the Santa Barbara Channel, 12 NM (14 miles) southwest of Santa Barbara and about 46.6 NM (53.6 miles) to the west-northwest from the FSRU's proposed location in the Santa Monica Basin. Data from land recording stations in Oxnard, such as wind data available from the Western Regional Climate Center, were not used in the analysis.

The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains revised information on Project emissions and proposed control measures. Sections 4.6.1.4 and 4.6.2 contain information on Project emissions of greenhouse gases and recent California legislation regarding emissions of greenhouse gases. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

As discussed in Impact AIR-8 in Section 4.6.4, an ambient air impacts analysis was conducted using the Offshore and Coastal Dispersion Model to evaluate potential impacts on ambient air concentrations of pollutants at downwind locations in the Pacific Ocean and along the coast of California (see Appendix G7 for a summary of the analysis). As stated, "an air quality analysis of criteria pollutants emitted from FSRU equipment and Project vessels indicates that the projected increases in the ambient concentrations of criteria pollutants would neither violate any applicable air quality standards nor contribute substantially to existing or projected air quality violations."

2006/V054

From: Eppolito [REppolito@verizon.net] Sent: Friday, May 12, 2006 12:50 AM To: BHPRevisedDEIR@slc.ca.gov

Subject: anti LNG

re:State clearing house number:2004021107

Dear Mr. Dwight Sanders,

I am a resident and home owner in Oxnard. I sincerely hope a LNG project is not approved for our community. I am willing to pay higher prices for natural gas and am willing to use less and to support alternative fuels.

Heidi Eppolito

V054-1

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

V054-1

April 19, 2006

Dwight Sanders
State lands commission,
100 Howe Avenue
Suite 100 South
Sacramento California 95825-8202

Re: Stop Cabrillo Port LNG

Dear Mr. Sanders,

Please stop Cabrillo port LNG industrial plant from progressing any further in the permit process. California law prohibits industrial intrusion on highly scenic areas. The last remaining wild areas on the Southern California Coast will be permanently despoiled if this industrial plant is installed. In fact over 10 national parks, national recreation areas, state, city and county parks will be despoiled. This would forever impact the quality of life of the areas residents and negatively impact the millions of vistors who come to hike and enjoy the seashore. In addition, federal and state governments own studies show that this project would:

- result in both short term and long term adverse impacts to the coast and it's residents
- Increase smog levels (tons of pollutants spewing directly upwind from our houses, beaches and hiking trails.
- contain 14 story high pollution spewing industrial towers with lines of support ships which forever will be our new horizon. This towers will be brightly lit at night being a 24 hour eye sore .
- harbor the possibility of a 14 mile wide explosive flash fire due to an accident of terrorist attack.
- be visible from all elevations in malibu from downtown Malibu all the way to Port Hueneme.
- require a "security zone" of 2.3 miles around it. (to protect from terrorism, accidents etc) which is in the same shipping channel where 10,000, container ships and oil tankers use annually.

There are many more negative impacts than the above "official" ones disclosed by the federal and state study.

PLEASE do not allow this to go forward. We, the citizens of Southern California will fight this project until it is derailed. Our money and time can be spent on projects that truly will improve the quality of life in Southern California rather than just provide an opportunity for foreign Companies to sell us gas that they and we do not need.

Sincerely.

Lareesa Ervin 15655 Conasset#7 Van Nyys, CA 91406 To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

April 19, 2006

Dwight Sanders State lands commission, 100 Howe Avenue Suite 100 South Sacramento California 95825-8202

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Sincerely, Madei, Escolute
36527 30th-8th
Palmdake-A7 935540

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

P390

2006/P390

April 19, 2006

Dwight Sanders
State lands commission,
100 Howe Avenue
Suite 100 South
Sacramento California 95825-8202

Re: Stop Cabrillo Port LNG

Dear Mr. Sanders,

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Sincerely.

Edgar Escapedo 1744 GARFIELD PL LOS ANGELES, CA 90028

Edgun Enn

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

From: ALICIA.ESTRADA@usbank.com Sent: Thursday, April 13, 2006 5:15 PM

To: BHPRevisedDEIR@slc.ca.gov Cc: aestrada@socal.rr.com Subject: Cabrillo Port Project

Importance: High

Mr. Dwight Sanders
California State Lands Commission
Division of Environmental Planning and Management
100 Howe Ave., Suite 100-South Sacramento, CA 95825-8202
Email: BHPRevisedDEIR@slc.ca.gov

RE: Cabrillo Port LNG Terminal

State Clearinghouse No. 2004021107

Dear Mr. Sanders:

I hope the California State Lands Commission will give strong consideration to approving the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port.

There are several reasons why this project needs to be approved.

- · We need reliable supplies of natural gas to meet the growing demand. While there is an abundant supply, most of it is located in other parts of the world. The delivery of LNG will become increasingly important.
- · We need to stabilize natural gas prices. Having another source of natural gas will help to moderate prices and, hopefully, prevent a recurrence of the high gas bills we had this past winter.
- \cdot LNG has been proven to be a safe, clean energy form. LNG can be safely converted to natural gas to heat our homes, cook our meals, fuel business operations, and more.
- The revised draft Environmental Impact Report has been re-worked with more information about the project's environmental impacts. It essentially shows that Cabrillo Port will have minimal impact on the environment and can be operated safely.

I appreciate the time that the commission has taken to look into this project. It's now time to get this project approved and permitted.

Sincerely,

Alicia Estrada

Electronic Privacy Notice. This e-mail, and any attachments, contains

Electronic Privacy Notice. This e-mail, and any attachments, contains information that is, or may be, covered by electronic communications privacy laws, and is also confidential and proprietary in nature. If you are not the intended recipient, please be advised that you are legally prohibited from retaining, using, copying, distributing, or otherwise disclosing this information in any manner. Instead, please reply to the sender that you have received this communication in error, and then immediately delete it. Thank you in advance for your cooperation.

2006/V009

V009-1

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

V009-1

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

April 19, 2006

Dwight Sanders
State lands commission,
100 Howe Avenue
Suite 100 South
Sacramento California 95825-8202

Re: Stop Cabrillo Port LNG

Dear Mr. Sanders,

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There are many more negative impacts than the above "official" ones disclosed by the federal and state study.

PLEASE do not allow this to go forward. We, the citizens of Southern California will fight this project until it is derailed. Our money and time can be spent on projects that truly will improve the quality of life in Southern California rather than just provide an opportunity for foreign Companies to sell us gas that they and we do not need.

LIZ Evangelista ce 404 Cavalleri Rd Malibu (a 20265 April 17, 2006

Mr. Dwight Sanders California State Lands Commission Division of Environmental Planning and Management

100 Howe Avenue, Suite 100-South

By Fax:

916-574-1885

Sacramento, CA 95825-8202

By Email:

BHPRevisedDEIR@slc.ca.gov

RE: Cabrillo Port LNG Terminal

State Clearinghouse No. 2004021107

Dear Mr. Sanders:

I am writing as the head of a major Santa Clarita Valley business, Blue Barrel/Waste Management. I am also Chairman of the Santa Clarita Valley Chamber of Commerce. As a local business leader, I support the Cabrillo Port LNG facility and believe it will provide needed new supplies of natural gas for California. As someone deeply concerned about our environment, I support this project as a way to help the state achieve its clean energy and clean air goals.

My company, along with many Chamber members, and businesses and residents throughout the Santa Clarita Valley, need reliable supplies of clean burning and efficient natural gas. LNG is both safe and clean and helps meet that need. The fact that LGN can easily be converted to natural gas and delivered through gas utility pipeline systems can help increase needed gas supplies and help moderate prices.

The State Lands Commission and its staff are to be applauded for conducting a comprehensive evaluation of the environmental impacts of the proposed Cabrillo Port offshore facility. Through your diligence, the recently released revised draft environmental impact report is responsive to many earlier public comments. This revised DEIR contains additional data from numerous studies and recent surveys related to biological resources, water resources, endangered species, oak tress, cultural resources, and other important issues. This report clearly explains why Cabrillo Post is an environmentally sound project and how it can be operated safely. I am also pleased to see that local impacts related to the natural gas pipeline construction process, an issue important to our members, local residents and the City of Santa Clarita, are addressed and will be closely monitored.

California needs a viable LNG delivery option and I believe Cabrillo Port meets that important need. I urge that Cabrillo Port be permitted and operated as soon as possible.

Sincerely,

Chris Fall Blue Barrel/Waste Management Chairman, Santa Clarita Valley Chamber of Commerce

V200-1

Project.

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed

V200-1

Poor

Comment Form/Formulario Para Comentarios

Cabrillo Port LNG Deepwater Port—Revised Draft EIR
Puerto de Aguas Profundas de LNG en el Puerto de Cabrillo—Borrador Revisado del EIR

To receive a copy of the Final EIS/EIR, you must provide your name and address.
Para recibir una copia del EIS/EIR Final, por favor proporcionar su nombre y dirección.
Name (Nombre): + OWMU) F6Z6USM
Organization/Agency (Organization/Agencia): HIM BN BKING /MAIIA) RKIDEVIT
Street Address (Calle): 29500 HEATHERCULTERD #33
City (Ciudad): MAU BU
State (Estado): CA Zip Code (Código Postal): 90 267
email address (dirección de correo electrónico):

Please provide written comments on the reverse and drop this form into the comment box.

Proporcione por favor los comentarios escrito en el revés y colóque esta forma en la caja del comentario.

You may also address any written comments to the attention of:

Dwight E. Sanders

California State Lands Commission
Division of Environmental Planning and
Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Include the State Clearinghouse number:
2004021107

Comments may also be submitted via email to: BHPRevisedDEIR@slc.ca.gov

Usted puede dirigir también cualquier comentario escrito a la atención de:

Dwight E. Sanders

California State Lands Commission
Division of Environmental Planning and
Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Incluir el número de State Clearinghouse:
2004021107

Los comentarios también se pueden enviar por correo electrónico a: BHPRevisedDEIR@slc.ca.gov

Joseph Shirt

OCT-2004 NUMM

All comments must be received by 5 p.m. Pacific Time, May 12, 2006

Substanting Lynn

Todos los comentarios debe ser recibido por 5 de la tarde, hora Pacífico, el 12 de mayo de 2006

(126)

P202-1

Comments/Comentarios (Use additional sheets if necessary/Puede utilizar hojas adicionales si es necesario):

FOR 25 years I HAVE LIVED IN MAILUS'S CLEAN AIR. I HAVE PERSONAN EXPENSED WITH FRIENDS + RELATIVES DISCUSSED. RELATIVES DISCUSSED. RELATIVES DISCUSSED. AND LONG BEACH PREA FROM PRIMARILLY SHAPING AND TRATFO AND YOU NOW ARE BRINGING THIS TO MY HOME TO KILL WANTE ONE MINEQUERM ME, HOW DARE YOU, / KEEP YOUR GHS AT THAT	FOR 25 YEARS I HAVE LIVED IN MAURUS
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	ME HOW DARE NOW, KEEP YOUR GAS BY HOME

No action will be taken until the environmental review process is completed.

No se tomará ninguna acción hasta que el proceso de revisión ambiental se haya terminado.

P202-1

Section 4.6.4 contains information about impacts of the proposed Project on air quality and mitigation that would be implemented. Included also is a discussion of the impacts of Project emissions on human health.

Comment Form/Formulario Para Comentarios

Cabrillo Port LNG Deepwater Port—Revised Draft EIR
Puerto de Aguas Profundas de LNG en el Puerto de Cabrillo—Borrador Revisado del EIR

To receive a copy of the Final EIS/EIR, you must provide your name and address.
Para recibir una copia del EIS/EIR Final, por favor proporcionar su nombre y dirección.
Name (Nombre): FERGUSM
Organization/Agency (Organizatión/Agencia): 나しかん ちらいと
Street Address (Calle): 29500 Hamtence IFF # 33
City (Ciudad): MAUが
State (Estado): Zip Code (Código Postal):
email address (dirección de correo electrónico):

Please provide written comments on the reverse and drop this form into the comment box.

Proporcione por favor los comentarios escrito en el revés y colóque esta forma en la caja del comentario.

You may also address any written comments to the attention of:

Dwight E. Sanders

California State Lands Commission
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100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Include the State Clearinghouse number:
2004021107

Comments may also be submitted via email to: BHPRevisedDEIR@slc.ca.gov

Usted puede dirigir también cualquier comentario escrito a la atención de:

Dwight E. Sanders

California State Lands Commission
Division of Environmental Planning and
Management
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Incluir el número de State Clearinghouse:
2004021107

Los comentarios también se pueden enviar por correo electrónico a: BHPRevisedDEIR@slc.ca.gov

All comments must be received by 5 p.m. Pacific Time, May 12, 2006

Todos los comentarios debe ser recibido por 5 de la tarde, hora Pacífico, el 12 de mayo de 2006

Comments/Comentarios (Use additional sheets if necessary/Puede utilizar hojas adicionales si es necesario):
HOW CAN ANY THING LIKE THIS BE PUSHED THRU
HOW CAN ANY THE WILL OF THE MAJORITY. DO NOT TURN US
INTO A LONG BEACH OR SAW PEORO.
No action will be taken until the environmental review process is completed.
No se tomará ninguna acción hasta que el proceso de revisión ambiental se haya terminado.

2006/V216

V216-1

V216-1

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

April 19, 2006

Dwight Sanders State lands commission, 100 Howe Avenue Suite 100 South Sacramento California 95825-8202

Re: Stop Cabrillo Port LNG

Dear Mr. Sanders,

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Sincerely, Karfali Fischl

KATALIN FISCH!
1390 QUENIDA DE CONTES
PACIFIC PACISADES CO. 90272

To view the responses to this letter, go to "Index--Read this First" and select "2006 Letters--Form Letter."

From: Galen Fitzgerald [galenfitz@hotmail.com] Sent: Wednesday, April 26, 2006 1:13 PM

To: bhpreviseddeir@slc.ca.gov Subject: Cabrillo Port Comments

My wife and I have lived in Ventura County since the early 1970's and have watched growth take place from day one. Growth requires many things with increased energy supplies being one. After talking to the local Gas Company personnel, we discovered that we are at the end of the gas line and if any shortages occur in the future we would be in a very bad position. We have decided that we are definitely in favor of the Cabrillo Port project with our decision being based on common sense versus fear.

We have attended several meetings concerning the project and have been interested in hearing about some of the reasons people have fear about the project. We listened as one lady said she was concerned because she thought the project would be putting a gas line under the street running by Saint John's Hospital. Others fear a terrorist attack against the deep water port.

Some fear an accident and a mushroom cloud. Is this really fear or an agenda against anything related to oil products? We have looked into the possible danger factor and have decided that we are a hundred times more likely to be killed in an auto accident than anything that might happen to Cabrillo Port. Driving an automobile is a risk we all accept on a daily basis.

Now for the common sense items. LNG is a clean and safe source of natural gas that we need to warm our homes, cook our food, operate transportation vehicles, generate electricity and many, many other things. Supplies are dwindling while demands are increasing. Are we going to bury our heads in the sand while this happens? Cabrillo Port will be a safe, environmentally sound project that is located far off shore. Similar projects are located in densely populated areas without serious mishaps. 24 of Japan's 40 LNG terminals are located near major cities. We have been impressed with BHP Billiton as a company that gives 1% of pre-tax profits to non-profit organizations in the local area. They would employ approximately 300 people during construction and 100 during the operation phase. Economic benefits to the local area would amount to approximately 25 million dollars annually. I have heard the City of Oxnard is against this project. As a citizen of Oxnard, I would call this extremely short sighted and a wrong headed decision that should be reversed.

For us, common sense wins out over fear hands down. We hope this project will be approved as soon as possible

Galen and Joyce Fitzgerald 1171 Fanshell Walk Oxnard, CA 93035 805 985-5282

2006/V033

V033-1

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

V033-1

G-204

Wednesday, April 19, 2006
Testimony of Alicia Flores, Director
La Hermandad Mexicana Transnacional de Oxnard
520 West 5th Street, Suite D
Oxnard, California 93030 (805) 483-4620

Oxnard Public Hearing

My name is Alicia Flores and I serve as the Regional Director of La Hermandad Mexicana Transnacional de Oxnard. Unfortunately, I cannot be here today as I am in Washington, D.C., lobbying on the national immigration reform bill in the United States Congress. I have asked my good friend, Leah Lacayo, to speak on my behalf.

I work everyday fighting for equal rights and opportunities for countless families and hard-working people here in Oxnard, especially Latinos. I have immense pride in my community and in my home and would never want anything bad to happen to it.

As a mother of 5 with 8 grandchildren, the safety of my family is my number one priority.

Initially, I was concerned about Cabrillo Port. I believe that too often poor, mostly minority, communities are left bearing the burden of hosting the infrastructure and development necessary to support society at large.

However, BHP Billiton turns this idea on its head by saying that <u>no one</u> should bear this burden.

Its project – Cabrillo Port – is located out in the middle of the ocean far, far away from us, and anyone!

Since it's located far from us, Cabrillo Port has practically no impacts on <u>any</u> communities that make this project possible.

Because Cabrillo Port is a temporary facility more than 21 miles offshore, I believe it is the safest alternative around.

I have asked questions about the onshore pipelines – Would these pipes be dangerous? Would these pipes hurt my children and grandchildren?

The answer is NO. These same pipelines are already under the ground today and have been there for decades. They'll be owned and operated by Southern California Gas Company, which has delivered natural gas to us for decades.

If anyone of us uses natural gas to cook food and to warm homes, then chances are those same pipes that have delivered natural gas to us for decades will help deliver the same natural gas from Cabrillo Port. I support Cabrillo Port and urge approval of this project. Thank you.

2006/G204

G204-1

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

G204-1

From: kmrsfree@aim.com

Sent: Monday, April 17, 2006 6:46 PM To: BHPRevisedDEIR@slc.ca.gov Cc: news@malibusurfsidenews.com

Subject: regarding the proposal for Cabrillo port

To whom it may concern

We are very distressed at the proposal to build a LNG terminal off the coast of Malibu. The gas pipelines will be running very close to the earthquake fault areas and could easily rupture should a major earthquake occur. This would cause a huge vapor cloud to head towards Malibu and Ventura and create a terrible environmental disaster. Should there be a tsunami as a result, the terminal could easily come off its moorings, just as the BHP Billiton gas terminal came off its moorings and floated 150 miles out to sea after hurricane Katrina. We surf regularly at Surfrider Beach and in Ventura. The coastline around Malibu has some of the clearest air in smog-filled LA. The 150 tons of smog producing chemicals that will be emitted by the terminal daily will destroy this clean air. The state parks have just purchased the land at the Rodeo campgrounds and evicted the long-time residents in order to create a state park. What is the point of them trying to preserve the environment when Malibu, Oxnard and Ventura air will be severly polluted?

We will be at the public meeting at Malibu High School tomorrow and strongly urge that no LNG terminals be built off the Malibu/Oxnard/Ventura coasts. This proposal will not benefit our community in any way and is an example of corporate greed.

Zuzana and Scott Freeman 20001 Valley View Drive Topanga CA 90290

Check Out the new free AIM(R) Mail -- 2 GB of storage and industry-leading spam and email virus protection.

2006/P007

P007-1

Sections 4.11.1 and 4.11.4 contain information on earthquakes and tsunamis. Section 4.2.8 discusses pipeline incidents.

P007-2

P007-1

P007-2

P007-3

P007-4

P007-5

P007-6

The Independent Risk Assessment (IRA), which was independently reviewed by the U.S. Department of Energy's Sandia National Laboratories, evaluates the consequences of a potential vapor cloud (flash) fire, as discussed in Section 4.2.7.6 and the IRA (Appendix C1). The IRA determined that the consequences of the worst credible accident involving a vapor cloud fire would be more than 5.7 NM from shore at the closest point, as summarized in Table 4.2-1. Figure 2.1-2, Consequence Distances Surrounding the FSRU Location for Worst Credible Events, depicts the maximum distance from the FSRU in any direction that could be affected in the event of an accident. The shape and direction of the affected area within the circle depicted in Figure 2.1-2 would depend on wind conditions and would be more like a cone than a circle, but would not reach the shoreline.

P007-3

Sections 4.11.1 and 4.11.4 contain information on geologic hazards, including tsunamis, and mitigation measures to address such impacts. For example, if the FSRU were to become unmoored, the patrolling tugboats would be used to hold it in place. Section 4.3.1.4 addresses this topic.

P007-4

The Project has been modified since issuance of the March 2006 Revised Draft EIR. See Section 1.4.2 for a summary of Project changes. Section 4.6.1.3 contains revised information on Project emissions and proposed control measures. Section 4.6.4 discusses the health effects attributed to air pollutants and includes revised impacts and mitigation measures.

P007-5

Sections 4.6.4 and 4.18.4 and 4.15.4 provide information on the Project's potential impacts on air, water quality and recreation.

P007-6

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.

From: Alan [alanf_45@adelphia.net] Sent: Monday, May 08, 2006 12:46 PM To: BHPRevisedDEIR@slc.ca.gov

Subject: LNG permitting

Gentlemen:

I believe I have a possible solution to the serious problem of public concern about a LNG facility off shore near Oxnard and or Ormond Beach.

The solution is simple; simply move the location of the floating terminal further South, offshore of the Naval Air Station at Pt Magu or further South offshore of land that is virtually uninhabited or seldom used, such as the military firing range South of the Naval Airfield.

Then, should the unthinkable occur and a disaster strike, it affects very few people.

Why place so many thousands of civilians in danger when, if the risk is so low, when by moving it South to an uninhabited area, only a small number of military personnel are in danger.

Sincerely,

Alan Friedman, PhD

P047-1

The deepwater port would be 12.01 nautical miles (13.83 miles) offshore and south of Point Mugu, as shown on Figure ES-1. Section 3.3.7 addresses other locations from Point Conception south to north of the San Diego Harbor that have been considered as potential locations for both offshore and onshore LNG facilities.

P047-1

P047-2
Section 4.2.7.6 and the Independent Risk Assessment (Appendix C1) contain information on public safety impacts from various incidents at the FSRU. The analysis indicates that the maximum impact distance of an accident would involve a vapor cloud dispersion extending 6.3 nautical miles (7.3 miles) from the FSRU. The FSRU would be located approximately 12.01 nautical miles (13.83 miles) offshore; therefore, consequences of an accident involving LNG transport by carrier and storage on the FSRU would extend no closer than 5.7 nautical miles (6.5 miles) from the shoreline. Figure ES-1 depicts the consequence distances

surrounding the FSRU location for worst credible events.

P047-2

April 18, 2006

Dwight E. Sanders California State Lands Commission Division of Environmental Planning and Management 100 Howe Avenue, Suite 100 South Sacramento, CA 95825

RE: Revised Draft EIR for Proposed BHP Billiton Cabrillo Port LNG Import Terminal.

Dear Sir:

Regional Watersheds in the entire state of California are working to comply with the National Pollutant Discharge Elimination System Permit, Total Maximum Daily Loads, and Assembly Bill 885 regulatory objectives, to make and keep the California Coast safe for residents and visitors alike.

I see nothing in the revised Draft EIR to ensure that our coast is not more at risk from the proposed LNG Import Terminal.

Phrases like "fewer support vessels", "reduce the potential", "less likely to release fluids", and "additional pipeline features...to reduce impacts in case of a release of natural gas" hold little meaning after an event like Hurricane Katrina. If we have learned nothing from that nightmare, and the recent tsunamis, it is that man does not control nature; nor does the man-made.

I urge you to reject this and similar projects.

Ims. marcha Jullmer

Sincerely,

Mrs. Marsha Fullmer 28935 Selfridge Drive Malibu, CA 90265 P213-1

Sections 4.18.1, 4.18.2, and 4.18.4 contain information on water quality and sediments.

P213-2

Project impacts on coastal ecosystems would be limited to the pipeline corridor during construction and operation (see Section 2.1). The shore crossing required for the proposed Project would be installed beneath Ormond Beach. With the proposed mitigation, the potential impacts of construction, operation, or an accident on terrestrial biological resources would be reduced to a level that is below the significance criteria.

Section 4.2.7.6 and the Independent Risk Assessment (Appendix C1) contain information on public safety impacts from various incidents at the FSRU. The analysis indicates that the maximum impact distance of an accident would involve a vapor cloud dispersion extending 6.3 nautical miles (7.3 miles) from the FSRU. The FSRU would be located approximately 12.01 nautical miles (13.83 miles) offshore; therefore, consequences of an accident involving LNG transport by carrier and storage on the FSRU would extend no closer than 5.7 nautical miles (6.5 miles) from the shoreline. Figure ES-1 depicts the consequence distances surrounding the FSRU location for worst credible events.

P213-3

P213-1

P213-2

P213-3

Your statement is included in the public record and will be taken into account by decision-makers when they consider the proposed Project.